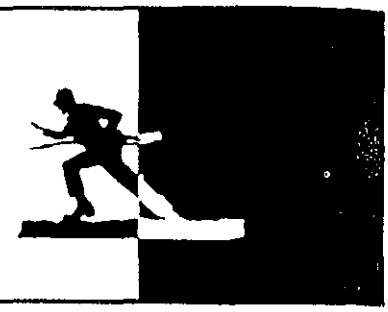
TRAINING NOTES



Fire Control

LIEUTENANT COLONEL WOLF D. KUTTER
MAJOR GLENN M. HARNED

Until recently, fire control was something our battalion took for granted — it was considered "Sergeants' business," the squad leader's responsibility.

But when we conducted live fire exercises as part of our squad ARTEP evaluation to determine our squad's proficiency first in the defense, and then in a movement to contact, we discovered that most of our squad and fire team leaders did not have the tactical and technical knowledge we thought they did. Tactically, they did not know how to fit their direct fire weapons to a piece of terrain, or how to integrate the fires of those weapons to effectively cover an expected enemy target array. Technically, at the squad level, they did not know how to control the rate and distribution of the fires of their direct fire weapons, particularly the LAW, the M203 grenade launcher, the M60 machinegun, and the automatic rifle. (In this article, we address only the technical aspects of fire control and not the tactical framework in which fire control is employed.)

In the past, the greatest emphasis in their training had been placed on teaching them how to get the kind of concentrated fire that was needed for qualification. The automatic riflemen had not been trained to use their bipods for distributed fire; in fact, there were very few designated automatic riflemen at all. The NCOs had not been trained to use oral fire commands and arm and hand signals to control the fire of any attached machinegun. Machinegun crew drill had not been performed regularly in all companies, nor had there been much practice in pair and volley firing with the LAW. And squad and fire team SOPs for controlling and integrating fires had not been established and rehearsed.

We realized that this failure to train in fire control and the integration of fires could have dire consequences for the battalion if we were suddenly committed to an active combat situation. For example, it could result in battle losses from friendly fire, the premature disclosure of positions, an ineffective employment of weapons, a loss of time in adjusting fires, and a considerable waste of ammunition. Clearly, we had to do something.

The first thing we did was to identify the causes of our fire control training problem. They turned out to be numerous:

- Most infantry officers today are not combat veterans, have never been squad leaders, and have had only limited experience with live fire exercises. Thus, they often fail to understand the critical importance of fire control at squad level. Similarly, almost all the NCOs they lead also lack combat experience, and they, too, do not understand the importance of fire control at squad level.
- Most collective training is officer-oriented. The emphasis is placed on tactics at platoon level and higher, and squad level training, in the words of most training programs, is "conducted concurrently as multi-echelon training." Officers tend to focus on organizing the training effort and executing the training plan according to

DEFINITIONS

Fire control: All actions connected with applying effective fire on a target to include the ability to select and designate targets for the appropriate weapons, open fire at the desired instant, adjust the fire of the weapons, regulate the rate of fire, shift fire from one target to another, and cease fire.

Integration of fires: Assigning either targets or sectors of fire, or both, to organic and supporting weapons to ensure that their fires are properly concentrated or distributed.

Fire concentration: Applying fire on one aiming point. Concentrated fire is directed at a point target.

Fire distribution: Applying fire in either depth or width, or both, on more than one aiming point. Distributed fire is directed at an area target.

Riflemen engage targets during live fire defense exercise.

a schedule instead of concentrating on the quality of training or meeting squad level standards. Even when the squads are given collective training time, the average squad leader lacks the requisite skills to train his squad in proper fire control procedures.

• Most Army ranges are designed for zeroing, familiarization, and qualification with a specific weapon system, not for the integration of weapon systems and the distribution of their fires at squad level.

• Annual ammunition allocations do not support extensive live fire exercises. Once the ammunition and pyrotechnics for familiarization, qualification, and tactical live fire training are subtracted, not much remains. Particularly critical shortfalls exist in tracer ammunition, smoke, and pyrotechnics for fire control, 40mm TP rounds, and LAW subcaliber rockets.

• Published ARTEP 7-15 and TC 25-3 ammunition requirements do not identify any need during live fire exercises for 5.56mm tracer ammunition, 40mm TP or signaling rounds, or smoke grenades.

• There is a distinct void in Army doctrine. Two series of field manuals, for instance, govern fire control. The FM-7 series provides tactical applications but does not discuss techniques. The FM-23 series provides the techniques of fire for each weapon system. But since FM 23-12 became obsolete, there has not been a field manual that explains how a leader integrates and controls the fires of all of his direct fire weapons. Certainly the three-page treatment of fire control in the 11B20 Soldier's Manual (Task 071-326-5501) is inadequate; like FM 7-8, it describes what must be done tactically, but not how to do it.

• Since the M16A1 replaced the M14A2 as the squad automatic rifle, and since FM 23-16 became obsolete, the Army has lacked any substantive doctrine or emphasis on automatic rifle marksmanship and distributed rifle fire. This problem will soon become critical, because the introduction of the M249 Squad Automatic Weapon significantly alters how a rifle squad fights and how it applies its fires.

After identifying these problems we then attacked our fire control problem at company and battalion level by conducting unit schools on fire control and "how to do it" procedures. The trainers were platoon sergeants, first sergeants, company commanders, and the battalion commander himself — experienced soldiers who had learned the techniques of fire control before it became a lost art. Our platoon leaders, as well as our junior NCOs, benefited greatly from these sessions.

We followed these unit schools with squad level training programs to develop and rehearse squad SOPs and battle drills. The squad training culminated in a live fire defense exercise, with each squad twice firing the scenario provided in ARTEP 7-15 (Squad Forced March/Live Fire). A brief refresher training period preceded the live fire problem, and an after-action review followed each live fire exercise.

Although this training program has dramatically improved the effectiveness and control of direct fires in our battalion, much work needs to be accomplished to solve the problem of fire control throughout the Army. Accordingly, these are our recommendations:

• Firing ranges and marksmanship training programs should be redesigned to place more emphasis on individual distributed fire, on fire control and the integration of direct fires, and on live fire ARTEP events at squad and platoon level.

• All live fire ARTEP events should be preceded by training on target detection ranges and by squad level MILES training that places a premium on fire control.

• Whenever possible, techniques of fire should be integrated into tactical training.

• ARTEP 7-15 and TC 25-3 should be rewritten to include more tracer ammunition, smoke, and pyrotechnics (to include 40mm signaling cartridges) for fire control training.

These two documents should be synchronized and should address live-fire as well as blank-fire events up to at least platoon level.

- Sufficient training ammunition should be allocated to support the programs listed above.
- FM 23-12 should be updated and re-published to prescribe the basic techniques and SOPs that enable the squad leader to effectively integrate and control the direct fires of his organic and supporting weapons.
- FM 23-16 should also be updated and re-published to provide doctrine and techniques for squad automatic rifle marksmanship with the M249 SAW.
- The 11B20 Soldier's Manual fire control task (071-326-5501) should be rewritten to include not only what to do but how to do it. Assault techniques, methods of fire control, the squad fire command, and the integration of direct fires should all be addressed.
- Appropriate tasks for fire distribution using the M16A1 rifle, M203 grenade launcher, M60 machinegun, and M249 SAW should be added to the 11B10 Soldier's Manual.

The integration of tactical training and the techniques of fire control at squad level are fundamental to success in combat, yet this vital area has been virtually ignored by the Army's doctrine writers, trainers, and training managers. If the recommendations listed above were adopted, they would make a significant contribution to raising the training curve and, consequently, the combat readiness of our rifle squads, the real cutting edge of our combat power.

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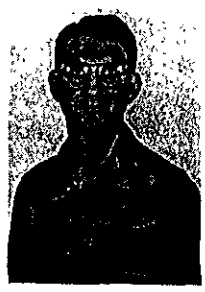

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Winning at the NTC:

The Delay

MAJOR VERNON W. HUMPHREY

In this continuing series on the battles fought at the National Training Center at Fort Irwin, California, we have examined a movement to contact, a deliberate attack, and a defend in sector mission. We have also looked at reconnaissance, fire coordination, and command and control. This article examines one of the most difficult of all operations, the delay.*

This particular battle took place in the "Valley of Death," which is a narrow valley that has almost impassable mountains to its north and south. The western end of the valley, about two kilometers wide, terminates in an escarpment known as "The Shelf." West of The Shelf, the terrain is extremely restricted until it drops away to the "Langford River" (actually a road with designated "fording sites"). The terrain is fairly open west of the river and gradually becomes more rugged until it takes on an extremely restricted character in the vicinity of Hill 1045. The key terrain features, from east to west, are Hill 692, The Shelf, Hill 785, the fording sites, The Porkchop, Hill 931, and the 1045 hillmass (see the accompanying map).

A task force was ordered to delay in sector against an expected attack from the east. It was to delay the enemy forward of the 1045 hillmass for 24 hours.

The task force established its initial delay positions on The Shelf, with Team Alpha on the right (south), Team Bravo in the center, and Team Charlie on the left (north). An obstacle consisting of an antitank ditch, mines, and wire was to be constructed across the valley west of hill 692, and an engineer company was attached to the task force for this purpose.

The scout platoon was to screen forward of Hill 692. On its way back after doing its job, it was to close a gap that had been left in the obstacle specifically for its use. The company commanders were directed to prepare delay positions in the vicinity of Hill 785 and to reconnoiter other positions in the vicinity of Hill 931.

Just at dawn, a number of OPFOR

** This is the seventh and last in this series. The views expressed are the author's own and do not necessarily reflect those of the Department of Defense or any element of it.*